

From: [Lial Tischler](#)
To: [Michael Pfeil](#); [Evans, Diane](#)
Cc: [Joel Camann](#)
Subject: Re: Akzo WER review
Date: Tuesday, January 21, 2014 4:29:42 PM
Attachments: [akzo nobel revised Table 5 12-30-13.docx](#)
[SHouToxLab_13122616130.pdf](#)

Michael, Diane

I wanted to follow up on the response to Diane's question which I sent out a while ago. Does it take care of all the questions? If not, please let me know.

Thanks

Lial

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On 12/16/13, 2:46 PM, "Michael Pfeil" <michael.pfeil@tceq.texas.gov> wrote:

>Lial-
>
>Here is EPA's comment. They are looking for the corrected statistical
>printout.
>
>Thanks.
>
>Mike
>
>-----Original Message-----
>From: Evans, Diane [<mailto:evans.diane@epa.gov>]
>Sent: Wednesday, December 11, 2013 10:49 AM
>To: Michael Pfeil
>Subject: Akzo WER review
>
>Hi Mike,
>
>Thanks to CDM for a very comprehensive submittal - the format + the
>electronic copies made the report very easy to review. I've completed my
>review and just have one comment.
>
>In the round #2 mysid tests, the 96-hour dissolved zinc results from the
>simulated downstream water analyses were inadvertently entered for the
>lab water on the "TWAs" spreadsheet in the Excel file (under the ZnWER2
>folder). CDM also caught this and the correct values are entered in a
>second tab ("TWAs-corrected") in the same excel spreadsheet.
>

>However, I believe the incorrect TWA values were used in the calculation
>of lab water LC50s for dissolved zinc (mysid), and in the following steps
>for calculation of the individual WER and the final WER. Since the
>incorrect TWA values are larger, smaller WERs (less than 1) for dissolved
>zinc were calculated in round 2. The LC50 statistical printouts that I
>reviewed are on adobe pages 419-423 of the individual round #2 report
>(also in the ZnWER2 folder, 453 pages total).

>

>It doesn't make a big difference in the final WER, but the dissolved WERs
>(TSK and Probit) for round #2 should come out closer to 1 with the
>corrected values in the lab water LC50s. It would be good to have the
>corrected final WER value in our records, particularly if the dissolved
>WER + dissolved/total ratio from the IPs (equations and factors from
>Table 6 in the 2011 IPs) are used in the TPDES permit.

>

>If I did the math correctly, the dissolved/total ratio using assumptions
>for the Houston Ship Channel is 0.6 - it might make a difference in the
>RP process. If the total WER is used for the TPDES permit, the
>dissolved/total ratio for zinc is already factored into the WER and the
>Table 6 factors + equations would not be applicable (please see Figure 1
>in the 1994 WER guidance).

>

>Using the first two and last four concentrations for the round #2 lab
>water dissolved zinc, the EPA spreadsheet calculated LC50s of 613.4 ug/L
>(Spearman Karber, not sure if trim is included) and 666.8 ug/L (probit).
>I think CDM's toxicity software is better than the EPA spreadsheet (which
>only allows six concentrations, including the control), so I'm guessing
>that they would want to recalculate.

>

>If I overlooked the correct LC50s for round #2, just let me know. I
>reviewed the corrected reports that Joel submitted (before we used the
>CDM ftp site), but I think they had the same values. EPA doesn't need a
>revised report - just the statistical printout and whatever else TCEQ
>needs, will be fine for us.

>

>Diane

>